

STATISTICS OF NDT SPECIALISTS CERTIFICATION IN SIBERIAN REGION

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The information about a formation and development in town Tomsk, in Tomsk Polytechnic University, system of preparation of NDT specialists, also system of certification of NDT specialists according to the requirements of State Standard Organization, State Technical Supervision (STS) “Rostekhnadzor”, Russian Society of NDT and TD is resulted in the report. Statistical data about distribution of quantity of the certified personnel by kind of testing and testing objects for last 8 years is resulted. It's specified that specialists of Kuzbass region occupy a considerable share in the list of the certified specialists. Activity prospects of the Regional center for certification of specialists in NDT Education Institution of High Professional Education TPU “Research Institute of Introscopy”.

Preparation of experts of nondestructive testing in the Tomsk polytechnical university (TPU) has begun in 1982 when in for the first time in Soviet Union has been opened specfaculty retraining and improvements of professional skill in again open direction “Nondestructive testing”. Programs assumed training with a separation from manufacture during 3, 6 and 9 months. Thus listeners studied all methods of nondestructive control and, after passage of courses, received the second diploma about higher education. The “Research Institute of Introscopy” Tomsk Polytechnical institute was base for work specfaculty. The faculty used the license of the ministry of the higher vocational training of the USSR.

The Regional center for certification (RCC) of specialists in NDT began its activity in September of 1992 when the first licences were received permitted the certification of specialists of acoustic and radiation NDT and given by National Certification Committee (NCC) for NDT. By order of Director №113 from 26.07.1994, the RCC was approved within structure of Research Institute as the self-dependent and self - supporting sub-unit. The training and certification of NDT specialists for 1 and 2 qualification levels has been passed in radiation, acoustic (ultra-sound), magnetic, eddy current, acoustic emission, capillary, vibro-diagnostic, visual and measuring, thermal (infrared) and stiloscopy kinds of NDT. Fig.1 shows the histogram of distribution of number of certifications in accordance with the kinds of NDT.

Kinds of NDT reflect the necessity of regional industry in certified personnel of NDT and the character of industry enterprises. Thus, large number of certifications connected with the visual and measuring testing is bound up with the increasing of the State Technical Supervision (STS) “Gostekhnadzor” requirements concerning the leaders of the enterprise sub-units, the direct leaders of the works fulfilled, because they carried out the direct responsibility for the quality of works and signed the corresponding documents. They didn't have deals directly with the nondestructive testing. The ratio between the number of certifications corresponding with other kinds of testing met the common spread of kinds of inspections in the regional industry.

The distribution of number of certifications relatively testing objects (in accordance with the Regulations “ПБ 03-440-02” is shown in Fig.2. It reflects also the character and type of the regional industry. The objects of boiler-type object's supervision are presented a lot number of thermal energy plants in Tomsk, Novosibirsk and Kuzbass regions and by numerical stuff of service personnel and by obligatory presence of NDT laboratories on every plant. The oil and gas industries of Siberia are also represented widely (Section 6) as well as the oil chemistry (Section 8).

The activity of the Centre is set in accordance with the requirements of NCC, STS, State Standard Organization of Russia and Russian Society of NDT and TD.

The educational, methodical and technical base of the certification Centre is founded on the close connection of RCC with the Department of physical methods and devices of quality testing and Research Institute of Introscopy of TPU.

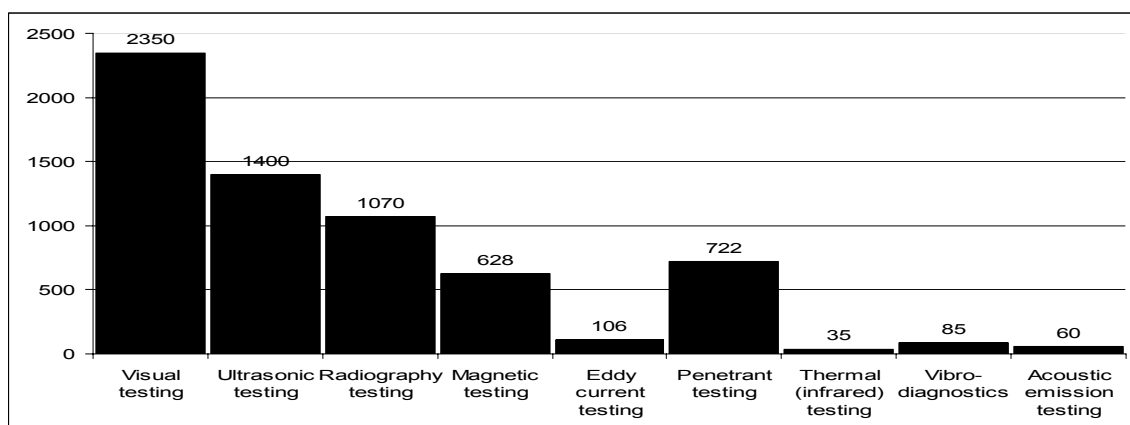


Fig.1 – Number of trained specialists in the CRC during 2004 – first quarter of 2009 years relatively kind of testing.

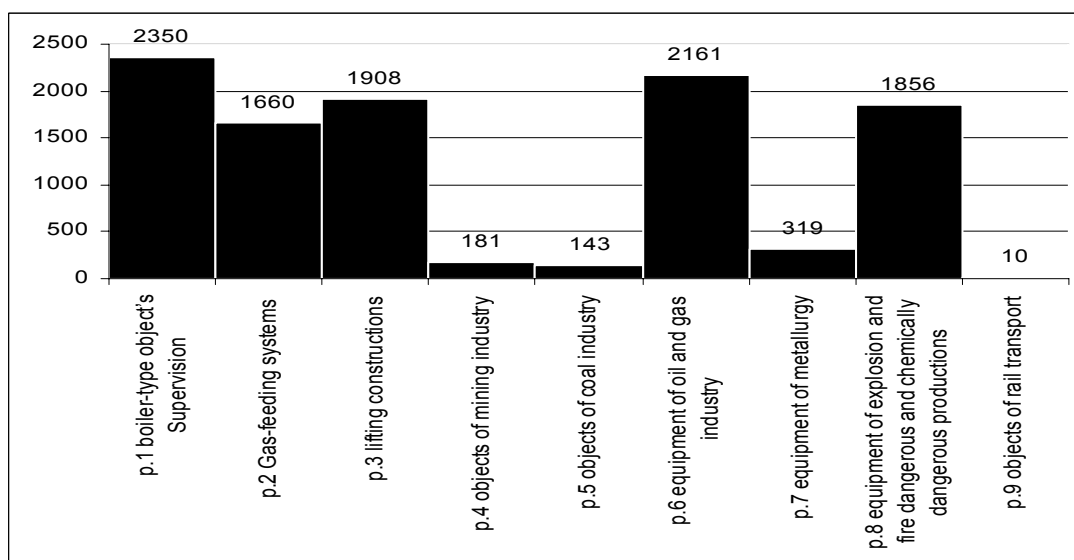


Fig.2 – Number of trained specialists in RCC of TPU during 2004 -1 quarter of 2009 years relatively testing objects.

From 2007 year, the equipment and methodical base was increased much by means of including the new-formed Centre for advanced training of NDT experts, which has been created on the base of State financing of Tomsk polytechnic university in accordance with the 70- million Grant which has been won for the educational direction “Non-destructive testing”. It permits us to carry out the training and certification of NDT using the most modern native and foreign equipment.

The Certification Centre is equipped with necessary methodical and study aids, has sufficient working space for passing lessons and exams, equipped by computer equipment and modern office equipment.

The training and certification of the NDT specialists is carried out by the high-qualified specialists of the research Institute of Introscopy, professors and assistant professors of Department of physical methods and devices of quality testing having 2 and 3 qualification levels. The RCC is annually the base for passing the first tour of all-Russian contests of NDT specialists and was the organizer of First tour of International NDT contest in January of 2007 year.

During the latest 8 years of the RCC work, more than 3500 specialists from different regions of Russia passed training courses and certification on 1 and 2 levels. The zone of the RCC activity involves the West Siberia, Far East, Kuzbass, Altai and Krasnoyarsk territories, Yakutia, Primorya territory, Sakhalin and also Kazakhstan, Uzbekistan and Tajikistan.

On fig.3 the quantity of prepared experts NDT for 2007-2009 for the enterprises of Kuzbass is resulted. The diagramme shows that distribution by kinds of the control for the industry of the

Kuzbass region close to average use of kinds NDT. In total for Kuzbass 700 persons is prepared for 3 years.

The activities of the certification Centre allows to strength the material base of laboratories of all of NDT kinds, create the bank of modern Normative Documentation and stable bounds with the enterprises – industry leaders of given region and leading NDT specialists of those enterprises. The further development of the RCC proposed to spread the area of accreditation relatively the kinds and objects of testing and going into International level.

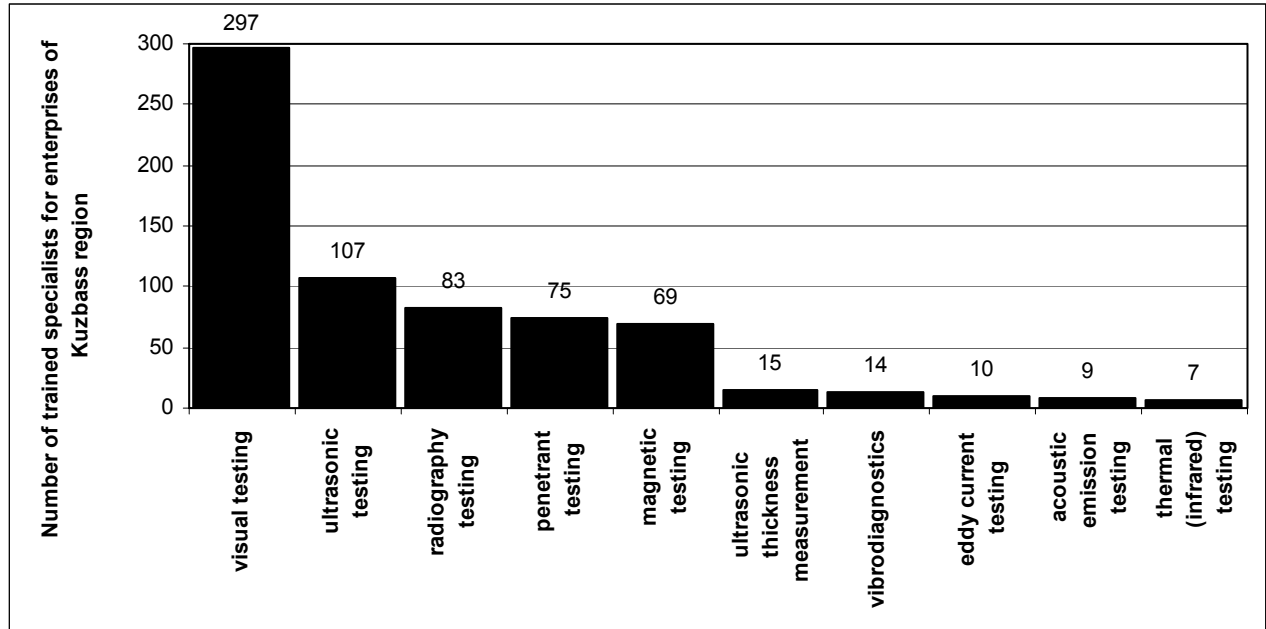


Fig.3 – Number of trained specialists in RCC of TPU during 2007 - 2009 years relatively relatively kind of testing for Kuzbass region.